

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

GENERAL ELECTRIC COMPANY and
GE WIND ENERGY, LLC,

*Plaintiffs/Counterclaim Defendants-
Cross Appellants,*

v.

THOMAS WILKINS,

*Defendant/Counterclaimant-
Appellant,*

and

mitsubishi heavy industries, ltd. and
mitsubishi power systems americas, inc.,

Counterclaimants-Appellants.

Appeals from the United States District Court for the Eastern District of California
in case no. 10-CV-0674, Judge Lawrence J. O'Neill.

**BRIEF FOR GENERAL ELECTRIC COMPANY
AND GE WIND ENERGY, LLC**

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July 26, 2013

CERTIFICATE OF INTEREST

Pursuant to Federal Circuit Rule 47.4, counsel of record for General Electric Company and GE Wind Energy, LLC certifies as follows:

1. The full name of every party represented by me is:

General Electric Company and GE Wind Energy, LLC.

2. The names of the real parties in interest represented by me are:

None.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the parties represented by me are:

General Electric Company has no parent company, and no publicly held corporation owns 10 percent or more of its stock.

GE Wind Energy, LLC is wholly-owned by General Electric Company.

4. The names of all law firms and the partners or associates that appeared for the parties represented by us in the trial court, or are expected to appear in this Court, are:

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STATEMENT OF RELATED CASES

This Court previously docketed an interlocutory appeal from the dissolution of a preliminary injunction in this case (No. 13-1086). Following the district court's entry of a final judgment, this Court granted the motion of General Electric Company and GE Wind Energy, LLC (collectively, "GE") seeking to dismiss that interlocutory appeal as moot. No. 13-1086, ECF No. 32 (Feb. 11, 2013).

GE cross-appealed (No. 13-1171) from the district court's summary judgment orders holding that GE's affirmative claims to quiet title to its patents are time-barred by the statute of limitations. GE has since filed a motion to dismiss to dismiss its cross-appeal. No. 13-1169, ECF No. 36 (July 25, 2013). The Court has not yet ruled on GE's motion to dismiss its cross-appeal.

This Court previously decided an appeal from a related investigation before the U.S. International Trade Commission ("ITC") in which GE accused Mitsubishi Heavy Industries, Ltd. and Mitsubishi Power Systems Americas, Inc. (collectively, "Mitsubishi") of infringing three GE patents, including U.S. Patent No. 6,921,985 ("the '985 patent"). *Gen. Elec. Co. v. Int'l Trade Comm'n*, 685 F.3d 1034 (Fed. Cir. 2012) (Newman, J., joined by Rader, C.J., and Linn, J.). This Court reversed the ITC's finding of no domestic industry for the '985 patent and remanded for further proceedings. The ITC's investigation with respect to the '985 patent is still

ongoing. *Certain Variable Speed Wind Turbines & Components Thereof*, Inv. No. 337-TA-641.

On September 3, 2009, GE sued Mitsubishi in the United States District Court for the Southern District of Texas for infringement of the '985 patent. *Gen. Elec. Co. v. Mitsubishi Heavy Indus., Ltd.*, No. 09-cv-229 (S.D. Tex.). The Texas district court has stayed that litigation pending resolution of the related ITC investigation.

On May 20, 2010, Mitsubishi sued GE in the United States District Court for the Western District of Arkansas, alleging antitrust violations arising, in part, out of GE's patent litigations against Mitsubishi based on the '985 patent. *Mitsubishi Heavy Indus., Ltd. v. Gen. Elec. Co.*, No. 10-cv-5087 (W.D. Ark.). The Arkansas district court has stayed that litigation pending the outcome of the related patent infringement actions.

STATEMENT OF ISSUES

(1) Whether the district court correctly found that Mr. Wilkins's trial testimony, including his shifting inventorship story for the '985 patent, was not credible.

(2) Whether the district court correctly determined, after weighing all of the evidence, that Mr. Wilkins is not a co-inventor of the '985 patent.

INTRODUCTION

Mr. Wilkins alleges that he co-invented nearly all claims of the '985 patent. But the story that he has spun in support of that claim has shifted repeatedly, including here on appeal.

In the ITC proceeding between GE and Mitsubishi, Mr. Wilkins initially testified (twice) that he did not know if he co-invented any claims of the '985 patent—despite having already worked nearly 1,000 hours in the litigation helping Mitsubishi try to invalidate the patent. After a lunch break with his lawyers, however, Mr. Wilkins announced that he had, in fact, co-invented claims of the '985 patent between 1998 and 2000, while working on a wind farm in Lake Benton, Minnesota.

Mr. Wilkins relied on that same inventorship theory for most of this case. At trial, however, his theory morphed. Mr. Wilkins continued to allege that he had invented the low voltage ride through solution of the '985 patent *by 2000* at Lake Benton. But in a narrative replete with impeached testimony and sudden claims of vastly improved memory, Mr. Wilkins argued that his conception and contribution were corroborated by emails and a visit with the named German inventors *in 2002*, and by an *October 2002* “Design and Cost Analysis” document.

Faced with this and other inconsistent testimony at trial, the district court strongly rebuked Mr. Wilkins’s credibility—concluding that: (i) he was “a game

player who was more concerned about gaining personal advantage than testifying truthfully”; (ii) he was “biased” and that Mitsubishi had “purchased” his testimony through payments totaling \$2 million (with an additional \$1 million hinging on the trial outcome); and (iii) his credibility was in “shambles,” “to the point where the veracity of even simple answers were called into question.” In sum, the district court concluded that Mr. Wilkins was “one of the worst witnesses I have ever seen” and that he “leaves this case with no credibility.”

Even so, the district court still considered the evidence that Mr. Wilkins and Mitsubishi had identified as supposedly supporting their inventorship theories. In a 17-page written decision, the district court identified the many evidentiary and substantive flaws with that material, and found no clear and convincing evidence that Mr. Wilkins had co-invented anything claimed in the ’985 patent. Mr. Wilkins returned that decision to the district court with a handwritten note stating that he “refused” and did “not recognize” the ruling, and “[did] not consent to any [of its] terms.”

On appeal, Mr. Wilkins and Mitsubishi appear to recognize that they cannot contest the district court’s factual findings on the merits. So they have tried to avoid them by: (i) jettisoning their trial inventorship theory; (ii) purporting to abandon reliance on Mr. Wilkins’s not credible testimony (despite attacking the district court’s lack of credibility findings elsewhere in their briefs); and (iii)

spinning a new theory that documents previously cited as mere corroborating evidence now actually prove Mr. Wilkins's conception and contribution to the '985 patent. They also seek to avoid the district court's well-supported factual findings by alleging legal error in two respects.

First, Mr. Wilkins and Mitsubishi argue that the district court erred in its "rule of reason" analysis by failing to consider "all" of their evidence. But the decision itself confirms that the district court did just that in its detailed analysis of the trial record. The district court did not err simply because, after cataloging the many problems with each piece of evidence, it did not expressly dismiss that same evidence for a second time "as a whole." And in any event, Mr. Wilkins's and Mitsubishi's argument depends upon a selective reading of the record that ignores all facts unhelpful to their case—contrary to a proper rule of reason analysis.

Second, Mr. Wilkins and Mitsubishi argue that the district court failed to compare Mr. Wilkins's supposed evidence of inventorship to the claims of the '985 patent. Of course, the district court had no reason to make that comparison given its correct finding that Mr. Wilkins did not conceive of anything claimed in the '985 patent in the first place. Even so, the district court made that comparison and correctly found that Mr. Wilkins did not make any contribution—let alone an inventive one—to the claims.

The district court's judgment that Mr. Wilkins is not a co-inventor of the '985 patent should be affirmed.

COUNTER-STATEMENT OF THE CASE

In 2008, the ITC instituted an investigation into Mitsubishi's infringement of several GE patents, including the '985 patent. In that proceeding, Mitsubishi challenged the validity of the '985 patent and hired Mr. Wilkins to search for prior art. Mitsubishi also argued that the '985 patent is unenforceable based on a claim that GE intentionally failed to name Mr. Wilkins as a co-inventor. The administrative law judge ("ALJ") rejected both arguments, and found a Section 337 violation. Based on a far less complete factual record than exists here, the ALJ concluded that Mr. Wilkins had co-invented the '985 patent (A8330), but found that GE did not intend to deceive the PTO by failing to name him as an inventor (A8336). The ITC did not review the ALJ's finding of no inequitable conduct, and Mitsubishi did not challenge that determination on appeal to this Court.¹

In 2009, after the ITC proceedings, Mr. Wilkins—though not a named inventor—granted Mitsubishi a license to the '985 patent. (A574[298:17-24].)

And on his website, Mr. Wilkins claimed to have retained ownership rights in the

¹ Mitsubishi suggests that GE acquiesced to the ITC's inventorship finding by not appealing it. (Br. 17-18.) But GE could not appeal that finding because it prevailed on the issue of inequitable conduct (from which the inventorship dispute arose), and Mitsubishi did not appeal any issue that implicated the ITC's inventorship determination. *See Elec. Fittings Corp. v. Thomas & Betts Co.*, 307 U.S. 241, 242 (1939).

'985 patent and U.S. Patent No. 6,924,565 ("the '565 patent") (an unrelated patent GE prosecuted in Mr. Wilkins's name after he left GE, and despite his refusal to participate). (A648[591:12-21]; A9015.) On April 15, 2010, GE filed suit in the Eastern District of California seeking to quiet title to the '985 and '565 patents. (A9004-05[¶¶ 28-29].)

In his counterclaim, Mr. Wilkins asked to be added as a named inventor to the '985 patent under 35 U.S.C. § 256, and sought a declaration that he has an ownership interest in the '985 and '565 patents. (A9071-75[¶¶197-233].) After intervening, Mitsubishi also filed counterclaims seeking declarations that Mr. Wilkins is a co-inventor and co-owner of the '985 patent. (A9095-96[¶¶144-57].)

The district court initially found that GE was likely to prevail on its claims, and preliminarily enjoined Mr. Wilkins from licensing either patent-in-suit. (A9123.) Mr. Wilkins responded by filing a declaration calling the district court "obtuse," "overly assumptive," and "ignorant." (A5087[¶5].) Later on summary judgment, however, the district court dismissed GE's ownership claims on statute of limitations grounds. (A19-55.)

In November 2012, the district court held a six-day bench trial on Mr. Wilkins's and Mitsubishi's inventorship counterclaims. On November 29, 2012, the district court issued an 17-page opinion finding that Mr. Wilkins and Mitsubishi had failed to establish that Mr. Wilkins co-invented any claim of the

'985 patent. (A2-18.) The district court entered final judgment that same day.

(A1.) This appeal followed.

COUNTER-STATEMENT OF FACTS

I. GE'S DEVELOPMENT OF THE '985 PATENT

A. The Low Voltage Ride Through Problem

Wind turbines convert wind into electric energy that is supplied to the power grid. Occasionally, "low voltage events" such as lightning strikes or animal contact with power lines can cause voltage on the power grid to drop, which can seriously damage nearby wind turbines. (A3[¶4].) For example, low voltage events can cause a turbine's blades to rotate out of control (A3; A805[1214:5-10]), and can cause electric current to backup into and damage sensitive components in the turbine's generator rotor (A3[¶5]; A805[1214:11-19]).

Before the '985 patent, wind turbines protected against these potential harms simply by disconnecting from the power grid during a low voltage event. (A3[¶6]; A653[611:4-12].) But as wind farms began providing a greater percentage of the grid's overall power, utilities began to require wind turbines to remain connected during the low voltage event (i.e., to "ride through" them). (A3[¶6]; A653[611:13-21].)

B. The Low Voltage Ride Through Solution Of GE's German Team

In 2002, a team of GE engineers in Salzbergen, Germany were working to meet the stringent standard of a German utility (E.On) that required wind turbines to ride through drops down to 15% of nominal voltage. (A7[¶30]; A682[725:4-726:5]; A705[817:6-13].) In so doing, they invented a way of controlling three key components of a wind turbine that would allow the turbine to remain connected to the power grid and safely ride through a low voltage event.

First, they prevented the turbine's blades from spinning out of control during a low voltage event by using a blade pitch controller to turn the blades away from the wind. (A706[819:19-821:7].) Rather than feathering the blades to stop their rotation entirely, the solution used "interrupted pitching," which varies the blade angle to control rotation speed. (*Id.*)

Second, they used a converter controller to maintain safe levels of electrical current in the turbine's generator rotor and inverter during the event (A706-07[819:4-18, 821:17-822:25]), and to activate a protective "crowbar" circuit to shunt current away from the turbine's sensitive components. (A708[827:23-828:14]). Under the German team's solution, the crowbar circuit was "reversible," which allowed the converter controller to selectively activate or deactivate the crowbar as needed during the low voltage event (unlike other types of crowbar circuits, which can only trip once). (A708[827:23-828:14].)

Third, they used a turbine controller to provide overall control of the turbine throughout a low voltage event. (A706-07[819:4-18, 821:17-822:5].) This ensured the turbine could operate at an appropriate wind speed and shut down non-essential components during low voltage events. (A710[836:17-22].)

Under the German team's solution, during a low voltage event, the blade pitch controller, converter controller, and turbine controller drew power from an uninterruptible power supply, or "UPS." The basic use of a UPS in wind turbines, however, was not novel. As even Mr. Wilkins admits, GE's turbines already contained a UPS before the German team even began developing their solution. (A591-92[367:23-369:1]; A614[459:5-8]; A707[823:8-15].)

By the summer of 2002, the German team was far along in meeting the E.On standard. (A10[¶54].) For example, in July 2002, Henning Luetze (leader of the German team, and named inventor on the '985 patent) explained that his team had already developed a "very detailed spec" (A4014), and was planning a presentation to review the technical details of their solution, including their use of controllers and "active crowbar assembly" (A4015). In fact, the German team was so far along that they had prepared "[d]raft specifications and concept documents" that were available for download through an internal GE website. (*Id.*)

C. The '985 Patent

GE eventually chose to commercialize the German team's low voltage ride through solution. In January 2003, GE filed a patent application for the idea, shortly before disclosing it to a customer. (A10[¶57]; A129; A748[987:1-21].) That application issued as the '985 patent on July 26, 2005, and names five members of GE's German team as inventors. (A129.)

Consistent with the German team's solution, the '985 patent describes controlling a wind turbine during a low voltage event such that: (i) the blade pitch controller varies the turbine's blade angles to maintain safe rotation speeds (A136; A138[5:35-47, 6:32-35]); (ii) the converter controller "guard[s] against excessive currents in the inverters" by selectively activating and deactivating a crowbar circuit to shunt excess current away from the turbine's sensitive components (A136-38[4:32-39, 4:65-5:11, 5:66-6:4, 6:40-49]); and (iii) the turbine controller controls the other controllers and shuts down non-essential components during a low voltage event (A136-38[4:38-43, 5:55-65, 6:36-39]). (*See* A136[2:24-34].) A UPS powers the blade pitch controller, converter controller, and turbine controller so they can perform their functions during low voltage events. (A137-38[4:32-43, 5:41-44].)

The four independent claims of the '985 patent reflect these specific controller functions. Claim 1 requires that the "turbine controller cause[] the blade

pitch control system to vary the pitch” of the turbine’s blades in response to low voltage events. (A139[7:9-13].) Claim 15 requires a converter controller that “monitor[s] a current flow in the inverter” and operates a circuit “to shunt current from the inverter and generator rotor in response to a control signal” during low voltage events. (A139[7:63-8:2].) And claims 29 and 39 describe using “the blade pitch controller to maintain a rotor speed below a predetermined overspeed limit,” and a turbine controller to disconnect non-essential components from the turbine generator during low voltage events. (A139-40[8:53-58, 9:20-10:5].) In each claim, a UPS powers the controllers so they can perform these required functions during the low voltage event. (A139[7:6-8, 7:65-66, 8:50-51, 9:17-18].)

II. MR. WILKINS AND HIS FINANCIAL RELATIONSHIP WITH MITSUBISHI

Mr. Wilkins began working for GE’s predecessor company (Zond Wind Energy) in April 1998, and later worked as an engineer at a GE wind turbine facility in Tehachapi, California. (A31-34.) In November 2002, Mr. Wilkins left GE permanently because he did not receive a raise he believed GE had promised him. (A578-79[315:18-317:3]; A5109[¶85].)

In March 2008, Mitsubishi hired Mr. Wilkins in the ITC investigation to search for prior art to the ’985 patent. (A579-80[318:19-24, 319:17-320:6]; A5022-23.) Mr. Wilkins worked approximately 1,000 hours between March 2008 and January 2009 in an effort to invalidate the ’985 patent—i.e., the same patent he

now claims to have invented. For that work, Mr. Wilkins received approximately \$200,000. (A14[¶93]; A580[320:13-325:21]; A3975.)

In August 2009, Mr. Wilkins entered into another agreement with Mitsubishi (A3961-63), as amended in December 2009 (A3964). Under those agreements, Mitsubishi paid Mr. Wilkins \$100,000 for an option to license the '985 patent, and an additional \$200,000 for "consulting" work. (A3964.) The agreements required Mr. Wilkins to submit invoices for his "consulting" time, but he did not submit any and cannot recall anything he did to earn the \$200,000. (A581-84[326:2-329:18, 334:16-337:9].) In return for those payments, Mr. Wilkins agreed to "take all necessary and reasonable steps" to support Mitsubishi in actions against GE regarding the '985 patent. (A3961; A3964.)

In November 2009, Mr. Wilkins and Mitsubishi negotiated a license to the '985 patent.² During the negotiations, Mr. Wilkins's counsel demanded significant additional funds for Mr. Wilkins to "stay in the game" against GE, and made clear that Mitsubishi's present offer "[was] inadequate for Wilkins to keep his place at the table." (A5019.) If Mitsubishi agreed to pay more, Mr. Wilkins's counsel promised that Mitsubishi would have "every ability to coordinate and manage

² Mr. Wilkins and Mitsubishi initially withheld documents concerning their negotiations and agreements on relevance and privilege grounds. After GE filed a motion to compel, the district court sanctioned them for withholding the documents. (A9134-35; A9143-44.)

Wilkins’ involvement to maximize Mitsubishi’s position in the litigation.”

(A5021.)

Mitsubishi agreed to pay more. It paid Mr. Wilkins a non-refundable “licensing” fee of \$1 million, which Mitsubishi opted to extend by paying an additional \$500,000 in December 2011. (A14[¶95]; A3967-69[¶¶4.1, 4.3(a)].) By trial in this case, Mr. Wilkins had received over \$2 million from Mitsubishi, with an additional \$1 million payment riding on the outcome of the trial. (A14[¶95]; A3969[¶4.3(b)]; A3975.)

III. MR. WILKINS’S SHIFTING INVENTORSHIP STORY

A. Mr. Wilkins’s Initial Denial Of Inventorship

Mr. Wilkins testified at trial in this case that he “immediately concluded that [he] was an inventor” after first reviewing the ’985 patent application in 2008 while consulting for Mitsubishi. (A567[270:25-271:1].) At his deposition in the ITC case in 2009, however, Mr. Wilkins *twice* answered “I don’t know” when asked if he had invented anything in the patent—despite having just spent approximately 1,000 hours studying the patent and trying to invalidate it. (A575-76[300:14-306:7].)

B. Mr. Wilkins’s Lake Benton Inventorship Theory

After a lunch break with Mitsubishi’s counsel, Mr. Wilkins suddenly announced—without GE asking a single question—that he had co-invented the

'985 patent. (A576[306:9-307:25].) According to Mr. Wilkins, he had done so between 1998 and 2000 while working at Lake Benton for GE's predecessor (Zond). (A604[416:12-419:14]; A5087-88; A5103-04.) Mr. Wilkins claimed that, at Lake Benton, he had used a NOS capacitor (what he called a UPS) to keep a wind turbine connected to the grid through voltage drops down to 70% of nominal voltage. (A6[¶17]; A529[118:6-13]; A752[1004:3-14].)³ But as Mr. Wilkins admitted, technology to manage dips down to 70% of nominal voltage existed before Lake Benton (A591[367:6-21]), a UPS had been used to keep a turbine connected during such voltage dips before Lake Benton (A591-92[367:23-369:1]), and it was obvious to engineers that a capacitor could power controllers during these small dips (A593[372:24-373:3]).

The undisputed record also shows that Mr. Wilkins did not make *any* relevant changes to the Lake Benton turbines—which already included a NOS capacitor, converter controller, blade pitch controller, and turbine controller. (A589[357:17-22].) Mr. Wilkins did not modify the blade pitch control system to control the speed of the turbine's blades during low voltage events (A6[¶21]; A529[119:23-120:4]; A530[121:25-122:10]), did not use a UPS to power the converter controller, and did not use a crowbar circuit to shunt electrical current

³ The '985 patent cites and distinguishes prior art methods for remaining connected to the power grid through small voltage dips down to 70% of nominal voltage. (A136[1:58-67].)

away from the generator rotor and inverter. (A6[¶¶22-24]; A592-93[A371:20-372:11]; A751[999:11-13]; A812[1239:4-10].)

In addition, the modifications made to the Lake Benton turbines that Mr. Wilkins oversaw (software changes and adding a new DC power supply for contactors) are indisputably irrelevant to the claims of the '985 patent, and in any event, came from others—and not from Mr. Wilkins. (A588-89[355:24-356:1, 357:1-16, 358:8-22, 359:1-6, 359:17-21]; A590[361:8-19, 362:7-363:21]; A592[369:15-370:20]; A676[703:20-704:7]; A677[705:20-22]; A678[711:8-11]; A3072-74; A5102[¶¶57,59].)

Mr. Wilkins never filed an invention disclosure for his Lake Benton work, and his boss (Craig Christenson) and customer for the turbines (Richard Gonzalez) both testified by deposition at trial that Mr. Wilkins never previously claimed to have solved the low voltage ride through problem at Lake Benton. Notably, Messrs. Christenson and Gonzalez were the only testifying witnesses with firsthand knowledge of Mr. Wilkins's work at Lake Benton, other than Mr. Wilkins. (A529[119:17-22]; A745[975:24-976:2]; A746[977:20-24].)

C. Mr. Wilkins's Initial Inventorship Theory In This Case

Throughout discovery in this case, Mr. Wilkins continued to base his inventorship story *entirely* on his work at Lake Benton. (A5034 (asserting he “conceived” of the '985 invention “[i]n approximately 1999,” “implemented” it “in

Spring of 2000,” and “validated” it “in May 2000 at Lake Benton”); A5077 (alleging he “conceived of the ideas” claimed in the ’985 patent “[b]etween 1998 and 1999”); A5057-88; A5103-04[¶¶8, 12, 64, 67] (declaring he “invented,” “test[ed],” “validat[ed],” and “finalized” the ’985 invention at Lake Benton during 1998-2000).)

Attempting to corroborate his Lake Benton inventorship story, Mr. Wilkins relied on the following evidence.

1. Lake Benton Documents

Mr. Wilkins pointed to a handful of documents dated in 2000, including a field guide, requirements document, test plan, test results, and “Scope of Work” document. But none of those documents discussed the use of a UPS to power any controller during a low voltage event (for any purpose), or otherwise reflected any inventive idea from the ’985 patent, let alone one attributable to Mr. Wilkins.

(A2355-64; A3000-03; A3117-47; A3072-106; A3814-98; A5102[¶59]; *see also* A587[350:14-25, 351:5-13]; A588[352:2-19]; A589-90[358:8-22, 359:1-6, 359:17-21, 360:1-12, 361:8-19, 362:7-10]; A592-93[371:10-372:11]; A594[377:7-378:5]; A678[711:8-11].)

2. 2002 Emails With The Named Inventors

Mr. Wilkins relied on emails exchanged with the named German inventors in the spring and summer of 2002 (none of which he had cited in his discovery

responses). (A5043-44.) At trial, Mr. Wilkins and Mitsubishi argued that the emails corroborated Mr. Wilkins's conception at Lake Benton, and that he shared his inventive ideas from Lake Benton with the named inventors by mid-2002. (A9157; A9196.) But they never explained why Mr. Wilkins was still discussing challenges with the low voltage ride through problem in 2002, if he had already solved it years earlier at Lake Benton.

In addition, the emails showed that Mr. Wilkins had general discussions with two named inventors about turbine components (e.g., converters, controllers, a UPS) and the low voltage ride through problem that they and many other engineers were still trying to solve in 2002. (Mitsubishi Br. 40 (conceding "[t]he discussions between Wilkins and the Germans and between the Germans themselves during the spring and summer of 2002 generated a large amount of email correspondence. But not one of those communications mentions a UPS").) The emails showed that the German team was merely looking for Mr. Wilkins to help confirm that their invention (then-implemented on German turbines) would work with the different "60 Hz" grid requirements and turbine components used in the United States. (A543[174:13-175:1]; A544[179:15-24]; A2031; A3171.)

3. August 2002 Trip To Germany

Mr. Wilkins claimed that he shared his supposedly inventive ideas from Lake Benton with the named inventors during a trip to Germany in August 2002—

a trip for which he admits that no documents exist. (A577[308:6-309:11].) At trial, Mr. Wilkins testified in great detail about specific elements of the '985 patent that he supposedly conveyed to the named inventors during his trip. (A550-52[202:9-209:18].) But at his ITC deposition in 2009—i.e., more than *three years closer in time* to the visit—Mr. Wilkins testified that he could not recall what, if anything, he had said during those same conversations. (A578[312:15-313:3]; A597[389:24-390:3].)⁴

4. Testimony From The Named Inventors

Mr. Wilkins relied on testimony from Mr. Luetze. But that testimony merely revealed that Mr. Luetze could not identify any specific contribution that Mr. Wilkins had made to the invention of the '985 patent:

- Q. Can you identify for me exactly what Tom Wilkins contributed to the '985 patent?
- A. Not exactly. It was a discussion amongst the engineers of us, and I don't know what exactly he contributed to this. I can't recall.
- Q. So what I'm asking, for the record, can you identify anything specifically that Tom Wilkins contributed to the low voltage ride through development project at GE?
- A. At the moment, I cannot remember.

(A615[462:16-24]; *see also* A9[¶¶42-46]; A613[453:21-454:3].)

⁴ Mr. Wilkins claims he spent an entire week in Germany with Mr. Luetze acting as his “handler.” (A550[202:9-16].) But Mr. Luetze testified that they just met for a few hours, on one day, during the trip. (A614[456:10-16].)

Mr. Luetze also testified that he could not identify (i) “who first came up with the idea of powering the controllers only with the UPS” (A614[459:5-8] (“Also, I don’t know.”)); (ii) what, if anything, Mr. Wilkins “contributed to the low voltage ride through development at GE” (A613[453:21-454:2] (“I can only say that he was in discussion ...”)); (iii) whether Mr. Wilkins said anything regarding pitch control systems (A614[457:15-17]; A615[461:6-462:8] (“I don’t know who came up with that idea.”)); or (iv) whether Mr. Wilkins had any ideas regarding a crowbar that could turn on and off during a low voltage event (A614[459:9-12] (“I’m not sure who came up with this.”)).

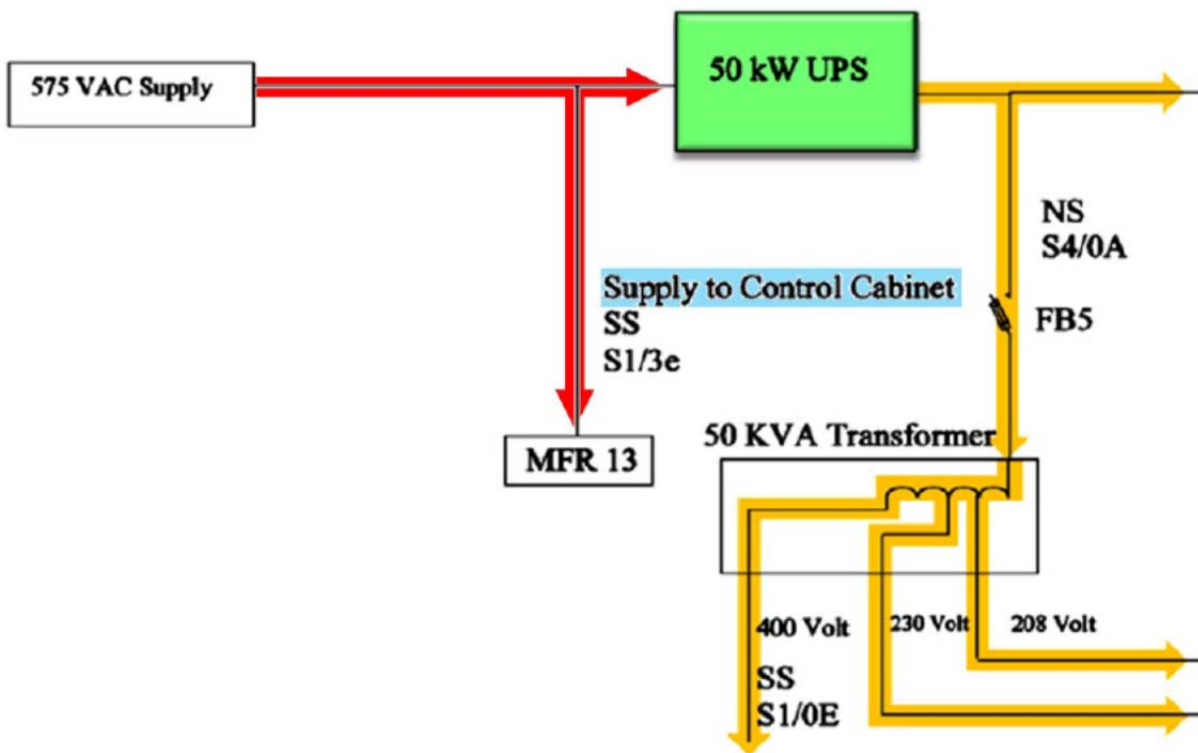
5. The October 2002 Design And Cost Analysis

Mr. Wilkins argued that his Lake Benton conception was corroborated by a customer proposal that he drafted in October 2002. At that time, Mr. Wilkins and a team of GE engineers based in Tehachapi, California were asked to develop a low voltage ride through solution (down to 30% of nominal voltage) for Florida Power and Light. (A9[¶¶47-48].) Mr. Wilkins was asked to collect the low voltage ride through solutions proposed by GE engineers. (A555-56[224:5-226:3]; A746[979:18-980:7]; A2365-66.)

As noted above, according to Mr. Wilkins, he had *already solved* the low voltage ride through problem years earlier at Lake Benton, and *again* in the summer of 2002 when working with the named inventors (who were meeting the

even more stringent E.On standard down to 15% of nominal voltage).) But Mr. Wilkins did not rely on any of that supposed past work. Rather, in a document titled “Design and Cost Analysis,” Mr. Wilkins summarized several ideas, along with a new proposal of his own that used a 50-kilowatt UPS. (A9-10[¶49-53]; A2310-21.) Mr. Wilkins’s expert conceded that the 50-kilowatt UPS was the only concept in the Design and Cost Analysis attributable to Mr. Wilkins. (A9175[113:5-19].)

But that 50-kilowatt UPS did not operate as claimed in the ’985 patent. For example, the Design and Cost Analysis does not show the UPS powering *any* of the three turbine controllers during a low voltage event. Instead, it proposed to *insulate* the wind turbine from the power grid during the event by placing the 50-kilowatt UPS between the power grid and turbine:



(A2320 (colors added); *see also* A711[841:8-20]; A3044.) In that arrangement, the turbine controller and converter controller located in the control cabinet under the label “Supply to Control Cabinet” (shown in blue) are between the grid and the UPS (shown in green), and therefore only can receive power from *the grid* (shown in red)—and *not* power from the UPS (shown in yellow)—during a low voltage event. (A707-08[825:7-826:13]; A711[841:8-20]; A813[1243:15-1244:18].)

At trial, Mr. Wilkins admitted that the Design and Cost Analysis was the *only* document in evidence that he had authored depicting a UPS. But he claimed that he had mistakenly put the UPS in the wrong location because he “was drawing this so fast.” (A599[397:4-7].) In other words, Mr. Wilkins alleged that the first and only time he put his supposedly inventive idea from Lake Benton in writing,

he described it incorrectly with respect to the core idea that he now claims to have invented.

The Design and Cost Analysis was missing other key aspects claimed in the '985 patent as well. For example, as Mr. Wilkins admits, it does not show the UPS powering the turbine's blade pitch controller. (A598-99[395:7-396:6].) And although the document discusses a crowbar circuit, it is not the "reversible" crowbar circuit of the '985 patent (that selectively activates and deactivates during low voltage events). (A2317.) Instead, as Mr. Wilkins explained, his team contemplated using a different crowbar circuit only during "an extreme event," because it could damage the turbine, and thus was "not the best solution." (A558[234:15-235:6]; A2317.) Mr. Wilkins concedes that no turbine has ever incorporated his 50-kilowatt UPS proposal. (A602[411:5-15].)

Faced with these many problems, Mr. Wilkins at trial tried to rely on a different diagram dated November 20, 2002, which depicts the 50-kilowatt UPS in a different location. But beyond his own testimony, Mr. Wilkins introduced no evidence that he had authored that diagram, which lists the "designer" as someone with the initials "OS." (A3149.) Moreover, the document was created weeks after Mr. Wilkins presented his flawed Design and Cost Analysis proposal to more than twenty GE engineers, any one of whom could have made the change. In fact, Mr. Wilkins's own expert did not rely on the November 20 diagram, and testified that

the flawed Design and Cost Analysis is the *only* document showing Mr. Wilkins's supposedly inventive idea. (A688[746:14-747:15].)

6. GE's Prosecution Of The '985 Patent

Mr. Wilkins and Mitsubishi claimed that Mr. Wilkins's supposed inventorship at Lake Benton was corroborated by documents that GE generated during prosecution of the '985 patent. For example, Mr. Wilkins and Mitsubishi relied heavily on the fact that GE initially listed Mr. Wilkins's name on the '985 patent application. But GE provided the district court with detailed evidence showing that the prosecuting attorney—working on a very rapid schedule due to an upcoming customer sale—had mistakenly listed Mr. Wilkins's name due to confusion resulting from multiple different invention disclosures. (A762-63[1044:8-1045:2].)⁵

⁵ Mr. Wilkins did not complete an invention disclosure for any idea relating to low voltage ride through. (A594[376:8-12].) But after Mr. Wilkins quit, another GE engineer (Tim Mohammad) prepared an invention disclosure describing the Tehachapi team's 50-kilowatt UPS solution. (A9[¶59]; A3039-45.) Confusion arose because GE engineer Dr. James Fogarty later prepared two invention disclosures that incorporated ideas from the German team and Mr. Mohammad's disclosure. (A11[¶¶60, 65, 67]; A713[846:19-847:18]; A2410-25; A3046-61.) Dr. Fogarty then prepared a third invention disclosure solely for the controller-based solution that the German team had developed, which did not list Mr. Wilkins as an inventor. (A11-12[¶¶68-70]; A715-16[856:1-12, 857:10-16, 857:25-858:8]; A2954-66.) Named inventors Till Hoffmann and Ralf Hagedorn also prepared an invention disclosure for the interrupted battery pitch system that was incorporated into the '985 patent, along with Dr. Fogarty's third invention disclosure. (A781-83[1118:25-1119:13, 1124:12-1125:22]; A2383; A2887.)

a. Dietmar Meyer's Email

Following that rush effort, GE attempted to conduct a more thorough inventorship determination before inventor oaths were due. As part of that analysis, GE in-house lawyer Lisa Moyles emailed the German team and asked for a factual narrative describing their work. (A2711.) Because Mr. Wilkins had left GE several months earlier, Ms. Moyles asked GE engineer Dr. James Fogarty to summarize Mr. Wilkins's contributions, if any, to the '985 patent application. (*Id.*) Ms. Moyles later made clear to those involved that "[i]f Tom Wilkins is at least a co-inventor, he must be named. US Patent law requires that the invention be issued to the legal inventors." (A3976.)

But Ms. Moyles did not receive the requested factual narratives. Instead, she received an email from a German GE engineer, Dietmar Meyer, who stated that he had "checked the issue together with Henning [Luetze] and Andreas Bu[e]cker" (two named German inventors), and who listed names next to the application claims without explaining how he made those determinations. (A2782-92.) Mr. Meyer did not have firsthand knowledge of Mr. Wilkins's work—in fact, he did not even know who Mr. Wilkins was. (A9146 (asking German team "Wer ist Thomas Wilkins?" ("Who is Thomas Wilkins?"))).)

Mr. Meyer's email is internally inconsistent. For example, it lists Mr. Wilkins for some claims requiring an "uninterruptible power supply" (claims 1-

16), but not for dozens of others that include the same limitation (claims 17-45)). (A2783-92.) In fact, Mr. Wilkins and Mitsubishi themselves disagree with the inventor lists set forth in the email much more often than not—arguing that Mr. Wilkins invented 27 claims the email does not attribute to him, and did not invent a claim for which the email lists him as sole inventor. (*Compare* A669-70[676:22-677:1] *with* A2787-92; *compare* A669[676:8-21] *with* A2786.)

The email also conflicts with an different email that Mr. Meyer sent a few weeks earlier, in which he explained that—after working with Mr. Luetze to identify “who should be named as inventors” for ’985 patent application—the inventors should be the five named German inventors, Dr. Fogarty, and another GE engineer Johannes Schulz. (A717[865:15-23]; A3957-58.) He did not mention Mr. Wilkins.

b. Mr. Rieken’s Chart

On March 11, 2003, Mr. Meyer’s assistant Stefan Rieken prepared a chart purporting to assign individual contributions made to GE’s low voltage ride through work. (A2886.) On its face, the chart appears to be little more than a pictorial representation of the inconsistent conclusions that Mr. Meyer presented in his February 2003 email. (*Compare* A2886 *with* A2782-92.) Like Mr. Meyer’s email, no evidence at trial explained what information or inventorship standard Mr. Rieken used for purposes of the chart. (A13[¶87].)

c. Mr. Mallie's Discussion With "All Of The Inventors"

Mr. Meyer's email and Mr. Rieken's chart also conflict with, and pre-date, an April 2003 (previously privileged) email, in which GE's outside lawyer, Michael Mallie, identified a discussion about the '985 patent application that he had with Mr. Fogarty and "all of the inventors." (A13-14[¶¶88-89].) Based on that discussion, Mr. Mallie recommended in the email that GE *not* name Mr. Wilkins as an inventor of the '985 patent because "his original idea was not disclosed in the Low Voltage Ride Through patent application, as stated by Jim Fog[a]rty and others." (A5016-17.)

However, Mr. Mallie further suggested that GE "[p]repare a new patent application that covers Mr. Wilkins[']s idea" because "his [50-kilowatt UPS] idea was not disclosed in the other application and no known prior art was identified." (*Id.*) GE prepared that application (A3911-55), but ultimately decided not to seek patent protection for the idea. GE employees variously described the idea as too technically "awkward" (A4020), too expensive, and not "proven to work," and observed that "many of the details [were] not completely defined." (A602[411:5-15]; A747[983:18-20]; A748[987:1-5]; A749[989:11-990:16]; A2108.)

d. The '565 Patent

Nine months after Mr. Wilkins quit, and seven months after filing the '985 patent application, GE filed the '565 patent application naming Mr. Wilkins as the

lead inventor—even though Mr. Wilkins refused to cooperate in that prosecution. (A141; A648[591:12-21].) Mr. Wilkins and Mitsubishi argued that GE left Mr. Wilkins off the '985 patent due to ownership concerns. But they never explained why, if that were true, GE included him several months later as an inventor on the '565 patent—which GE expected would be a “home run” with customers. (A753[1006:4-25]; A5001.)

IV. THE DISTRICT COURT’S TRIAL DECISION

During a six-day bench trial, the district court received testimony from 15 witnesses (including live testimony from Mr. Wilkins and individuals involved in prosecuting the '985 patent), and admitted more than 140 exhibits. On November 29, 2012, the district court issued a 17-page opinion setting forth its factual and legal findings in 95 detailed paragraphs. (A3-14.) Based on those findings, the district court concluded that Mr. Wilkins and Mitsubishi had failed to offer clear and convincing proof that Mr. Wilkins co-invented the '985 patent. (A17-18.)

A. The District Court’s Findings Regarding Mr. Wilkins’s Lack Of Credibility

The district court began its analysis by assessing Mr. Wilkins’s credibility. It noted that Mr. Wilkins had received roughly \$2 million from Mitsubishi to date, with the possibility of an additional \$1 million depending on the outcome of trial. (A14[¶¶92-95].) And with the benefit of documents showing that Mr. Wilkins had demanded those substantial payments to have him “stay in the game” so that

Mitsubishi could “manage” him, the district court found that Mr. Wilkins was “biased,” “a purchased witness/party,” and “more concerned about gaining personal advantage than testifying truthfully.” (A5[¶¶13, 14]; A17; A5019; A5021.)

The district court also found that Mr. Wilkins lacked credibility based on the many “purposefully evasive” answers that he gave, and numerous inconsistencies in his constantly-evolving story: “Impeachment during cross examination became so constant that it became routine, even to the point of the Court’s finding it difficult to believe the obvious without corroboration.” (A17; *see also* A5[¶14] (“Mr. Wilkins was repeatedly impeached during cross-examination, to the point where the veracity of even simple answers were called into question.”).)

The district court further found that Mr. Wilkins was “a game player” trying to give whatever answer would benefit him most:

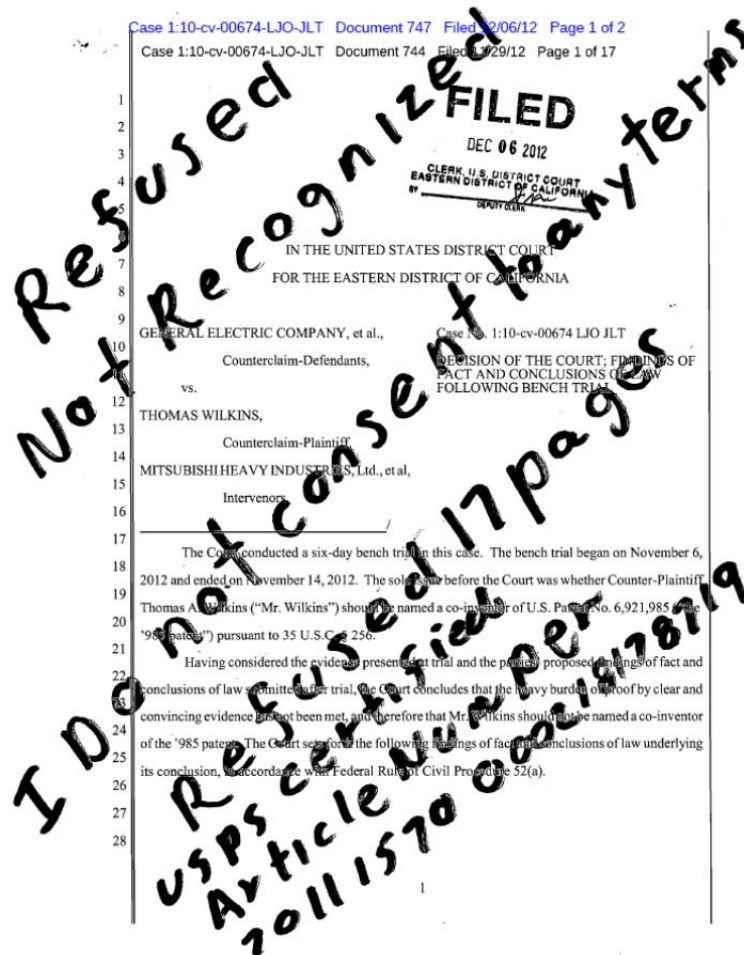
[Mr. Wilkins’s] bias is only paralleled by his attitude that this is all a game. His definition of truth seems to be that which personally will benefit him most. The Court does not share that definition.

(A17; *see also* A5[¶14].) The district court concluded that “Mr. Wilkins leaves this case with no credibility.” (A17.)

That finding was supported by other evidence as well. For example, in October 2011, GE attempted to take Mr. Wilkins’s deposition, but had to terminate it after Mr. Wilkins *four times* refused to take an unqualified oath to tell the truth,

and proceeded to insist that the court reporter, videographer, and opposing counsel take the same oath. (A585[340:7-342:1]; A9030-38.) After the district court called his behavior “not acceptable” (A9047[6:15-21]), Mr. Wilkins filed a declaration calling the district court “obtuse,” “overly assumptive,” and “ignorant.” (A5087[¶5].)

Even more recently, Mr. Wilkins responded to the district court’s trial order and final judgment by filing both documents with the words “Refused,” “Not Recognized,” and “I do not consent to any terms” scrawled across them:



(A9203-04; A9205.)

B. The District Court’s Finding That Mr. Wilkins Is Not A Co-Inventor Of The ’985 Patent.

Despite recognizing that credible testimony from the putative inventor is ordinarily “nearly indispensable” to an inventorship claim (A17), the district court considered all of the other evidence presented at trial and in the parties’ post-trial filings, and concluded that, “[s]imply put, there are no reliable documents that verify what, if anything, Mr. Wilkins contributed to any of the claims of the ’985 patent.” (A18.)

As part of that analysis, the Court reviewed the Lake Benton documents cited by Mr. Wilkins and Mitsubishi and concluded that none of them showed any contribution from Mr. Wilkins to the ’985 patent. (A5-7[¶¶16-26]; A18.)

The district court reviewed Mr. Wilkins’s emails with the named inventors in 2002, and found that “there is no specific mention in any of the emails of a UPS coupled to a converter for the purpose of LVRT.” (A8[¶37].) The district court also found that no documentary evidence revealed anything Mr. Wilkins allegedly discussed during his August 2002 visit to Germany. (A9[¶46].) Without evidence that Mr. Wilkins contributed anything inventive to the German team’s work, the district court concluded that “[t]he fact that discussions [about general turbine components and low voltage ride through] occurred is alone not enough.” (A18.)

For the October 2002 Design and Cost Analysis, the district court observed that it was Mr. Wilkins's idea to use the 50-kilowatt UPS that the document illustrates the UPS in a location from which it could *not* power the turbine's three controllers during a low voltage event. (A9-10[¶¶47-50].) The district court further found that the crowbar idea depicted in the document was not Mr. Wilkins's idea, and contrasted the solution shown in the Design and Cost Analysis with the German team's solution discussed in Mr. Luetze's November 2002 email. (A10[¶¶53-57].)

The district court considered the testimony of Mr. Wilkins's expert, Dr. Harley, but found it inadequate because he "relied heavily on Mr. Wilkins, and therefore lacked a credible foundation." (A17.)

The district court also found the deposition testimony from Mr. Luetze unpersuasive because "[h]e was unable to give even a single, specific or convincing example to justify the conclusion of Wilkins' contribution." (A17.) The district court noted that "Mr. Luetze testified that he could not recall where exactly the concept of a UPS supplying power to the controllers during a low voltage event originated from and that this was a 'very obvious requirement.'" (A9[¶43].)

Finally, the district court rejected Mr. Wilkins's and Mitsubishi's attempt to corroborate their inventorship theory based on GE's prosecution of the '985 patent.

The district court found that GE added Mr. Wilkins's name to the application after "a hurried job without the important factual discovery and investigation having been completed before the trigger on the application was pulled." (A12[¶75].) The district court gave little weight to Mr. Meyer's February 2003 email and Mr. Rieken's chart (neither of which had a sponsoring witness with firsthand knowledge at trial) because, among other reasons, there was insufficient factual context to understand their content. (A13[¶¶83, 87].)

Based on those factual findings, and its review of the record, the district court concluded that, "[h]aving considered the evidence presented at trial and the parties' proposed findings of fact and conclusions of law submitted after trial," Mr. Wilkins and Mitsubishi had not carried their heavy burden to prove inventorship by clear and convincing evidence. (A2.)

V. MR. WILKINS'S NEW INVENTORSHIP THEORY ON APPEAL

On appeal, Mr. Wilkins and Mitsubishi have disclosed an entirely new inventorship theory. Both have abandoned any claim that Mr. Wilkins co-invented the '985 patent at Lake Benton—i.e., the *only* inventorship theory that Mr. Wilkins had offered in the ITC and this case. (*E.g.*, Wilkins Br. 54 ("[I]t is Mr. Wilkins's work with the Germans in 2002 that makes him a coinventor, not his earlier LVRT work at Lake Benton II.")). Both also purport to have abandoned any reliance on

Mr. Wilkins' trial testimony, despite contesting district court's credibility findings elsewhere in their briefs. (Wilkins Br. 3, 51-54; Mitsubishi Br. 3-4, 41 n.3.)

Mr. Wilkins and Mitsubishi also now contend that the district court erred by failing to find conception and contribution by Mr. Wilkins based on documents and other evidence that they previously relied upon *solely* to *corroborate* their now-abandoned Lake Benton inventorship theory. (A9166; A9196.) As discussed below, those new arguments fail based on the same well-supported (and correct) factual findings that the district court made in the proceedings below.

SUMMARY OF ARGUMENT

The district court correctly held that Mr. Wilkins is not a co-inventor of the '985 patent. That ruling alone should be affirmed given the district court's well-established factual findings that Mr. Wilkins was a "purchased" and game-playing witness with no credibility—findings that even Mr. Wilkins and Mitsubishi purport not to challenge, at least in some portions of their briefs. Nor can Mr. Wilkins and Mitsubishi overcome the absence of a credible inventor by arguing that other trial evidence supports a new inventorship theory on appeal. Regardless of waiver, the district court carefully and thoroughly analyzed that same evidence and concluded that it did not contain clear and convincing proof of any inventive contribution to the '985 patent by Mr. Wilkins. That was not clear error.

STANDARD OF REVIEW

The named inventors on a patent are presumed to be the only inventors.

Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997).

As a result, “a person seeking to add his name [to a patent] must meet the heavy burden of proving its case by clear and convincing evidence.” *Shum v. Intel Corp.*, 633 F.3d 1067, 1083 (Fed. Cir. 2010) (quotations omitted).

Inventorship is a question of law reviewed de novo, but the district court’s underlying factual findings are reviewed for clear error. *Vanderbilt Univ. v. ICOS Corp.*, 601 F.3d 1297, 1303 (Fed. Cir. 2010). Under clear error review, “the court’s findings will not be overturned in the absence of a ‘definite and firm conviction’ that a mistake has been made.” *Nilssen v. Osram Sylvania, Inc.*, 504 F.3d 1223, 1229 (Fed. Cir. 2007).

Credibility determinations are entitled to particularly strong deference on appeal. See *Celsis In Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922, 929 (Fed. Cir. 2012); *Baxter Int’l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1330 (Fed. Cir. 1998). Indeed, “[c]redibility determinations by the trial judge can virtually never be clear error.” *Celsis*, 664 F.3d at 929 (quotation omitted).

ARGUMENT

I. THE DISTRICT COURT CORRECTLY FOUND THAT MR. WILKINS DID NOT CO-INVENT THE '985 PATENT.

A. The District Court Properly Found That Mr. Wilkins Lacked Credibility.

Although Mr. Wilkins and Mitsubishi claim not to contest the district court's credibility findings, Mr. Wilkins spends five pages attacking those findings (Br. 58-62), and Mitsubishi argues that Mr. Wilkins "was telling the truth" (Br. 52). Even putting aside the strong deference owed to the district court's credibility determinations, *Celsis*, 664 F.3d at 929, these criticisms lack merit.

First, Mr. Wilkins asserts that "[c]oncerns about a putative inventor's credibility are *the norm* for inventorship cases." (Wilkins Br. 58.) But the district court's concerns here went far beyond "the norm." It is not "the norm" for putative inventors to spend 1,000 hours trying to invalidate the same patent they claim to invent. It is not "the norm" for putative inventors to receive \$2 million from an interested party, and to stand to make an additional \$1 million depending on the trial outcome. (A14[¶¶92-95].) And it is not "the norm" for putative inventors to change their testimony so frequently that an experienced district court judge describes them as "one of the worst witnesses I have ever seen." (A842[1360:22-1361:1].) Mr. Wilkins had *extreme* credibility problems that alone justified the district court's judgment.

Second, Mr. Wilkins cannot dispute findings that Mitsubishi “purchased” his testimony—as confirmed, for example, by his demand for significant payments “to stay in the game” against GE, and in return, his promise to allow Mitsubishi to “manage” him. (A5[¶13]; A842[1360:16-20]; A5019; A5021.) Mitsubishi’s payment of \$200,000 for “consulting” work—for which Mr. Wilkins submitted no invoices and cannot recall a single thing he did to earn the money—further confirm that Mr. Wilkins’s testimony was “purchased.” (A583-84[335:23-337:9].)

Third, Mr. Wilkins (Br. 59-60) and Mitsubishi (Br. 17-18) both note that the ALJ did not criticize Mr. Wilkins’s credibility in the ITC action. But the ALJ made his findings: (i) before Mr. Wilkins demanded and received \$1.8 million more just to “stay in the game” and to allow himself to be “manage[d]”; (ii) without the benefit of the complete factual record about Mr. Wilkins, including his relationship with Mitsubishi and documents about that relationship only produced after GE filed a motion to compel in this case; and (iii) without observing the shifting and inconsistent testimony that Mr. Wilkins repeatedly provided at trial in this action.

Fourth, Mr. Wilkins (Br. 60) admits that he was impeached, but claims that those instances only extended to “immaterial” and “tangential” points. That is not true. GE repeatedly impeached Mr. Wilkins on multiple core issues, including for questions directed to the work he supposedly did, the interactions he supposedly

had with the inventors, the reasons he supposedly left GE, and the constantly-changing nature of his inventorship story. (*E.g.*, A575-78[300:14-305:14, 308:6-313:3, 314:12-315:24]; A598-99[395:7-396:6].)⁶

Fifth, Mr. Wilkins (Br. 60-61) complains that it was unfair to impeach him with statements he made years ago. But at trial, Mr. Wilkins attempted to justify his inconsistencies by claiming that his memory of key events *actually improved over time*:

Q. It was true in 2009, but you are telling us it is not true today?

A. I'm saying I have better recall today.

Q. So a decade after the event, you now recall events that you didn't recall in 2009; is that correct?

A. Yes.

(A578[313:21-314:1].) With Mr. Wilkins's recollection improving in parallel with his growing financial interest, the district court was rightly skeptical of his newly-"refreshed" memory.

⁶ This argument suggests that someone who lies about "immaterial" issues can be trusted to tell the truth when faced with "material" questions. As the district court found, just the opposite is true. (A5[¶14] ("Mr. Wilkins was repeatedly impeached during cross-examination, to the point where the veracity of even simple answers were called into question."); A17 ("Impeachment during cross examination became so constant that it became routine, even to the point of the Court's finding it difficult to believe the obvious without corroboration.")).

Finally, Mr. Wilkins (Br. 62) and Mitsubishi (Br. 3, 52) argue that the district court rested its credibility findings based on how “likeable” Mr. Wilkins was on the stand. But the district court expressly found that the *substance* of Mr. Wilkins’s testimony was inconsistent and “purposefully evasive,” leaving “the firm impression that Mr. Wilkins is a game player who was more concerned about gaining personal advantage than testifying truthfully.” (A5[¶14]; A17 (“His definition of truth seems to be that which personally will benefit him most.”).)

Because only the district court can evaluate witness demeanor and credibility on the stand, these findings are effectively unassailable on appeal. *Celsis*, 664 F.3d at 929.

B. Mr. Wilkins And Mitsubishi Cannot Prove Inventorship Without Credible Testimony From Mr. Wilkins.

As the district court correctly recognized, credible testimony from the putative inventor is “of nearly indispensable value” when assessing a claim of inventorship. (A17.) Indeed, GE is unaware of any case in which the putative inventor was found not credible, and yet still prevailed on an inventorship claim. *See, e.g., University of Colo. Found., Inc. v. American Cyanamid Co.*, 342 F.3d 1298, 1308-1309 (Fed. Cir. 2003) (rejecting inventorship theory based upon inventor’s discredited testimony); *GAF Corp. v. Amchem Prods., Inc.*, 514 F. Supp. 943, 967, 969-70 (E.D. Pa. 1981) (rejecting inventorship claim where putative inventor’s testimony was “simply not credible”). There is no reason for this Court

to blaze new law on the facts of this case—involving a biased, purchased, and not credible purported inventor.

On appeal, Mr. Wilkins and Mitsubishi attempt to avoid that result by concocting a new inventorship theory that supposedly disavows any reliance on Mr. Wilkins’s testimony. (Wilkins Br. 35; Mitsubishi Br. 3-4.) Because this theory was never presented below, it is waived. *3M Co. v. Avery Dennison Corp.*, 673 F.3d 1372, 1377-78 (Fed. Cir. 2012); *Digital Vending Serv. Int’l v. University of Phoenix, Inc.*, 672 F.3d 1270, 1278-79 (Fed. Cir. 2012).

Moreover, Mr. Wilkins and Mitsubishi cannot simply excise Mr. Wilkins’s trial testimony from the record as if it never happened. It did happen. And the inability of Mr. Wilkins (the *only* live trial witness with *firsthand* knowledge of the work that he did) to articulate a consistent inventorship story remains a critical fact in determining whether clear and convincing evidence of inventorship exists—regardless of any attempt to disavow his testimony. *See, e.g., Price v. Symsek*, 988 F.2d 1187, 1195 (Fed. Cir. 1993) (“An evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the inventor’s story may be reached.”).

Finally, even if the Court could look past Mr. Wilkins’s conflicting account, this is not a case in which inventorship could be demonstrated without the putative inventor’s testimony. Although Mr. Wilkins and Mitsubishi attempt to piece a new

inventorship theory together from other sources, those sources consist of the *same evidence* that the district court already found *not clear and convincing* when told through the words of Mr. Wilkins. It is difficult to fathom how that insufficient evidence would transform into clear and convincing proof of inventorship *on appeal* solely because Mr. Wilkins no longer sponsors it.

At bottom, Mr. Wilkins and Mitsubishi are left with evidence that must corroborate itself and that (according to them) tells an alternative inventorship story (not based on Lake Benton) that conflicts with Mr. Wilkins's not credible and shifting trial account. That is not evidence of clear error.

C. The District Court Committed No Legal Errors In Its Inventorship Analysis.

After assessing Mr. Wilkins's lack of credibility, the district court carefully reviewed the evidence and made extensive factual findings. Unable to demonstrate clear error in those findings, Mr. Wilkins and Mitsubishi instead attempt to recast their fact-based arguments into two supposed legal errors: (i) that the district court supposedly failed to assess their corroborating evidence under a "rule of reason" standard; and (ii) that the district court allegedly failed to compare Mr. Wilkins's alleged work to the claims of the '985 patent. Neither argument has merit.

1. The District Court Correctly Applied The “Rule of Reason” Standard.

To guard “against courts being deceived by inventors who may be tempted to mischaracterize the events of the past through their testimony,” this Court requires corroboration of a putative inventor’s testimony—the sufficiency of which is measured under a “rule of reason” standard. *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1374 (Fed. Cir. 2009) (quotation omitted). Mr. Wilkins and Mitsubishi argue that the district court failed to apply the “rule of reason” test in its analysis of the evidence. But those arguments fail for the many reasons set forth below.

2. The Rule of Reason Standard Is Not Applicable Given The Lack Of Credible Testimony From Mr. Wilkins.

As a threshold matter, for the rule of reason requirement even to apply, the putative inventor must first provide credible testimony to *corroborate*—because the very purpose of the requirement is to “determin[e] the credibility of an inventor’s testimony.” *Loral Fairchild Corp. v. Matsushita Elec. Indus. Co.*, 266 F.3d 1358, 1364 (Fed. Cir. 2001) (quotation omitted). As noted above, the district court correctly found here that Mr. Wilkins’s testimony was not credible. (*Supra* pp. 31-33, 36-39.) Because there was nothing credible to corroborate, there was no need for the district court to assess any corroborating evidence—under a “rule of reason” test or otherwise.

Nevertheless, the district court still considered *all* of Mr. Wilkins's and Mitsubishi's supposedly corroborating evidence, and correctly found that it did not show clear and convincing proof of inventorship by Mr. Wilkins.⁷

3. The District Court Properly Considered Mr. Meyer's Email And Mr. Rieken's Chart.

Mr. Wilkins (Br. 55-57) and Mitsubishi (Br. 42-43) contend that the district court "ignored" and improperly "discount[ed]" Mr. Meyer's February 2003 email, in which he listed GE engineers (including Mr. Wilkins) under various claims of the '985 patent application. But the district court did not "ignore" that document, even though no witness with firsthand knowledge testified about it at trial. Rather, the district court expressly considered the email and concluded that it was not reliable proof of anything that Mr. Wilkins had done for a variety of reasons:

The email, however, does not indicate what standard Mr. Meyer applied in deciding which names to list; what instructions, if any, Mr. Meyer provided to Mr. Luetze and Mr. Buecker; whether anyone else felt obligated to include Mr. Wilkins for claims because his name had already appeared in the cover sheet of the as-filed application, or anything else Mr. Leutze and Mr. Buecker may have been thinking, had discussed, or had relied upon. Thus, the substantive opinions [in the email] lack foundation.

⁷ Mitsubishi argues that the district court's analysis of this evidence was impermissibly tainted by Mr. Wilkins's lack of credibility. (Br. 52.) But again, the very purpose of the rule of reason requirement is to verify the *credibility* of the putative inventor's story. *See, e.g., Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1461 (Fed. Cir. 1998).

(A13[¶84].) Mr. Wilkins and Mitsubishi do not identify any clear error in that assessment.

The district court's decision to treat Mr. Meyer's email as unreliable was further justified for several other reasons. For example, Mr. Meyer had no firsthand knowledge of Mr. Wilkins or his work, and therefore, was in no position to corroborate anything he might have done. (A9146 (asking German team "Wer ist Thomas Wilkins?" ("Who is Thomas Wilkins?")).) *See Weaver v. Houchin*, 467 F. App'x 878, 881 (Fed. Cir. 2012) (nonprecedential) ("Without personal knowledge of [a purported inventor's] contribution, [a witness's] testimony is insufficient corroboration to prove [inventorship] by clear and convincing evidence.").

And just a few weeks earlier, Mr. Meyer had sent another email (which also had no sponsoring trial witness with firsthand knowledge) after consulting with Mr. Luetze to identify "who should be named as inventors" for the '985 patent application. In that email, Mr. Meyer's listed seven inventors (including all five named German inventors), but made no mention of Mr. Wilkins. (A3957-58.) Thus, at best, the district court had two vague and contradictory and emails from Mr. Meyer—hardly clear and convincing proof of anything.

In addition, Mr. Wilkins (Br. 55-56, 64) and Mitsubishi (Br. 50) contend that the February 2003 email from Mr. Meyer constitutes "admissions of fact" that GE

attributed the idea of the claimed UPS solely to Mr. Wilkins. But the email does not list Mr. Wilkins for *dozens of claims* that require a UPS. (A2787-92.) And at trial, Mr. Wilkins and Mitsubishi argued that Mr. Wilkins should be named as a co-inventor for 27 claims that Mr. Meyer's email does not attribute to him (claims 17-45), and should *not* be named for one claim listing Mr. Wilkins as the *sole* inventor (claim 13). (A669-70[676:8-21, 676:22-677:1]; A2786-92.) In other words, even Mr. Wilkins and Mitsubishi disagreed with Mr. Meyer's list nearly two-thirds of the time—again, not clear and convincing proof.

The unreliable nature of Mr. Meyer's email is even further confirmed by Mr. Luetze's conflicting admission that he could not attribute any idea claimed in the '985 patent to Mr. Wilkins (A615[462:16-24]), and by Mr. Mallie's email in which he described the decision not to name Mr. Wilkins as an inventor as based on a later discussion with "all of the inventors" (two of which Mr. Meyer claimed to have "checked with" in his email) (A2782; A3215).

Mr. Wilkins and Mitsubishi cannot claim that a document provides clear and convincing "admissions" of inventorship when they themselves disagree with its conclusions more often than not, and when the document conflicts with multiple other sources in the record.

The same holds true for Mr. Wilkins's and Mitsubishi's arguments based on Mr. Rieken's chart—which merely appears to be a pictorial representation of the

list of names contained in Mr. Meyer's email. (A13[¶87]; A2782; A2886.) Just like Mr. Meyer's email, there is no evidence explaining the standard that Mr. Rieken applied in creating the chart (Mr. Rieken did not testify, nor did anyone else involved in creating the chart), and its content appears to conflict with the same multiple other sources of record evidence discussed above. As a result, the district court correctly determined that the chart lacked sufficient context to support an inventorship finding by clear and convincing proof. (A130[¶87].)

4. The District Court Properly Considered All Of The Other Relevant Documentary Evidence.

Mr. Wilkins (Br. 49, 55-58) and Mitsubishi (Br. 45-47) raise a host of arguments in an effort to show that the district court failed to consider their other allegedly corroborating documentary evidence. But the district court did consider that evidence, and did not err in its analysis. (A7-9[¶¶32-33, 49-54]; A11[¶¶60-71]; A12[¶¶79-80].)

First, Mr. Wilkins asserts that "the district court improperly limited its documentary record to 'documentation of the discussions between Mr. Luetze and Mr. Wilkins.'" (Br. 57.) But the district court expressly assessed dozens of other supposedly corroborating documents, including Mr. Wilkins's Lake Benton documents (A6-7[¶¶17-26]), the 2002 correspondence between Mr. Wilkins and the named German inventors (A7-8[¶¶32-36]), the Design and Cost Analysis (A9-10[¶¶47-53]), and numerous documents from GE's prosecution of the '985 patent,

including Mr. Meyer’s email and Mr. Rieken’s chart (A10-14[¶¶59-90]). Mr. Wilkins does not identify any flaws with the district court’s analysis of these many documents—he just ignores it.

Second, Mitsubishi contends that the district court failed to consider certain documents from prosecution of the ’985 patent. (Br. 45-47.)⁸ But in a section of its decision titled “The ’985 Patent Application process,” the district court explicitly addressed testimony and numerous documents related to GE’s prosecution of the ’985 patent, including some that mistakenly attributed ideas in the ’985 patent application to Mr. Wilkins. (A10-13[¶¶58-91].)

Based on its review of the documents and other record evidence (including live testimony from three individuals involved in the ’985 prosecution), the district court concluded that GE’s lawyers had included Mr. Wilkins’s name on the ’985 patent application “without the important factual discovery and investigation

⁸ Mitsubishi contends that for “GE documents authored by GE employees, GE bears the burden of showing why the admissions were incorrect.” (Br. 49) But that is not the law. The burden of proof remained on Mr. Wilkins and Mitsubishi at all times. *See Shum*, 633 F.3d at 1083. Regardless, as the district court found, GE carried that burden in any event. (A12[¶75]; A13[¶87].)

having been completed.” (A12[¶75].) Again, Mitsubishi identifies no clear error with that finding.⁹

Third, Mr. Wilkins and Mitsubishi suggest that the district court should be faulted because its decision does not address every admitted trial exhibit. Of course, the law does not require the district court to write an opinion that expressly discusses every admitted exhibit (or that confronts the minutia of every argument raised by every party). *See Medtronic, Inc. v. Daig Corp.*, 789 F.2d 903, 906 (Fed. Cir. 1986) (recognizing district court need not provide a “complete discussion of all possible permutations and combinations” of the evidence because this Court “presume[s] that a fact finder reviews all the evidence presented unless he explicitly expresses otherwise”).

But even so, the decision itself makes clear that the district court took ***all*** of the admitted evidence into account when reaching its decision: “***Having considered the evidence presented at trial and the parties’ proposed findings of***

⁹ Mitsubishi says it was “undisputed” at trial that “internal records” showed that GE’s lawyers “consolidated” Mr. Wilkins’s ideas “with the German team approach” in the as-filed ’985 patent application. (Br. 46-47.) That argument was refuted at trial. The district court correctly concluded that the ’985 application was based on Dr. Fogarty’s January 16, 2003 invention disclosure, which ***excluded*** any ideas from Mr. Wilkins. (A11-12[¶¶68-75].) Moreover, the evidence confirms that the invention disclosures “consolidated” in the ’985 patent application were Dr. Fogarty’s January 16, 2003 invention disclosure and the interrupted battery pitch invention disclosure by named inventors Messrs. Hoffmann and Hagedorn. (A2887.)

fact and conclusions of law submitted after trial, the Court concludes that the heavy burden of proof by clear and convincing evidence has not been met, and therefore that Mr. Wilkins should not be named a co-inventor of the '985 patent.” (A2 (emphasis added).)

Fourth, nor is there any merit to Mr. Wilkins’s argument that the district court somehow erred by failing to evaluate the evidence “as a whole.” (Br. 2, 49-58.) Having considered and rejected each piece of supposedly corroborating evidence, the district court was not required to reweigh that flawed evidence together for a second time. *See, e.g., Symantec Corp. v. Computer Assocs. Int’l, Inc.*, 522 F.3d 1279, 1295-96 (Fed. Cir. 2008) (rejecting inventorship claim after individually addressing flaws with each piece of corroborating evidence); *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1373 (Fed. Cir. 1998) (noting district court appropriately excluded evidence “lacking detail and clarity” from its rule of reason analysis). In any event, considering the evidence collectively in this case does not cure those many individual deficiencies. It just further highlights the number of holes in Mr. Wilkins’s ever-changing inventorship story, as discussed above.

Fifth, Mitsubishi claims that the district court required corroboration of supposedly corroborating evidence. (Br. 47-52.) But the district court did no such thing. Its opinion shows that it was looking for context to understand what those

documents meant in the first place—i.e., precisely the type of analysis that is proper under the rule of reason standard. *Ethicon*, 135 F.3d at 1464 (“Under the ‘rule of reason’ standard for corroborating evidence,...the trial court must consider corroborating evidence *in context*”) (emphasis added; citation omitted). The district court did not need to accept everything in the documentary record as true, or to accord equal (or any) weight to every piece of evidence—particularly for the many record items that were internally inconsistent and/or in conflict with other evidence.

In the end, the district court considered the entire documentary record and correctly found that it did not support Mr. Wilkins’s shifting inventorship claim. No argument raised on appeal shows that any of those factual findings were clearly erroneous.

5. The District Court Properly Considered Mr. Luetze’s Testimony.

Mr. Wilkins and Mitsubishi contend that Mr. Wilkins’s inventorship was corroborated by Mr. Luetze—who according to Mitsubishi “testified by deposition that Wilkins should have been named as an inventor,” and who according to Mr. Wilkins “never wavered in his conviction that Mr. Wilkins was a coinventor.” (Wilkins Br. 29, 51-53; Mitsubishi Br. 7, 39-44.) But Mr. Luetze (a German engineer with no training in U.S. patent law) did “waver”; for example, when identifying seven co-inventors of the ’985 patent, without listing Mr. Wilkins

(A3957), and when admitting he could *not* identify *anything* “that Tom Wilkins contributed to the ’985 patent” (“I don’t know what exactly he contributed to this”) (A615[462:16-24]) or “to the low voltage ride through development at GE” (“I can only say that he was in discussion ...”) (A613[453:21-454:2]).¹⁰

These arguments also ignore Mr. Luetze’s testimony that he could not identify: (i) “who first came up with the idea of powering the controllers only with the UPS” (A614[459:5-8]); (ii) what Mr. Wilkins may have contributed regarding pitch control systems (A614[457:15-17]; A615[461:6-462:8]); or (iii) whether Mr. Wilkins had any role in the idea of using a crowbar that could selectively turn on and off during a low voltage event (A614[459:9-12]).

¹⁰ Mr. Wilkins unfairly suggests that GE is to blame for Mr. Luetze’s poor memory because he testified in 2008 before GE waived privilege and produced documents relating to prosecution of the ’985 patent. (Br. 51.) To preserve its privilege over those communications, GE could not produce them for any reason, including to refresh witness memories. Moreover, GE only waived privilege after Mr. Wilkins’s attorneys obtained privileged documents that GE had inadvertently produced to Mitsubishi in a different case, and improperly began using them during discovery in this case, despite knowing them to be privileged. To prevent Mr. Wilkins and Mitsubishi from painting a misleading picture of GE’s inventorship determination, GE agreed to a limited privilege waiver. Mr. Wilkins could have sought to re-depose Mr. Luetze after GE’s privilege production, but did not (thus undermining his suggestion that Mr. Luetze would have provided better testimony for Mr. Wilkins if allowed to review the documents). Moreover, as discussed above, there is every reason to believe the documents would have confirmed to Mr. Luetze that Mr. Wilkins did not make an inventive contribution to the ’985 patent.

The district court did not commit clear error in deciding, as a factual matter, that Mr. Luetze's uncertain testimony did not support Mr. Wilkins's inventorship claim. (A17.)¹¹

6. The District Court Properly Considered Dr. Harley's Testimony.

Mr. Wilkins disputes the district court's finding that his expert, Dr. Harley, did not provide convincing testimony because "he relied heavily on Mr. Wilkins, and therefore lacked a credible foundation." (Br. 53-54; A17.) But at trial, Dr. Harley admitted on cross examination that the *only* basis for his opinion that Mr. Wilkins invented the idea of using a UPS to power any controller during a low voltage event was **Mr. Wilkins's own testimony**—which itself was not credible, as the district court found. (A680[717:3-11]; A681[722:12-18].) Therefore, with no credible foundation for Dr. Harley's opinions, among other flaws, the district court rightly gave little weight to his testimony.¹²

¹¹ Mitsubishi also relies on the testimony of named inventor Till Hoffman. (Br. 26-28.) But Mr. Hoffman did not corroborate any inventive contribution from Mr. Wilkins. In fact, the trial record confirms that Mr. Hoffman has never met Mr. Wilkins (A779[1111:2-3]), has never had a discussion with Mr. Wilkins (A779[1111:4-6]), and did not receive any assistance from Mr. Wilkins in developing the ideas he contributed to the '985 patent (A787[1141:17-22]; A2383).

¹² Dr. Harley did not consider the 2002 emails between Mr. Wilkins and the German team that Mr. Wilkins and Mitsubishi now argue are crucial evidence of conception and contribution.

D. The District Court Properly Found That Mr. Wilkins Did Not Contribute Anything Inventive To The '985 Patent Inventors Based On The Design And Cost Analysis.

On appeal, Mr. Wilkins and Mitsubishi argue that the Design and Cost Analysis provides clear and convincing proof that Mr. Wilkins conceived of and contributed to the claims of the '985 patent. But that new argument is waived. It also fails in view of the trial record, which confirms the district court's findings that the document does not: (i) disclose any inventive ideas claimed in the '985 patent; or (ii) reflect any contribution from Mr. Wilkins.

1. The District Court Correctly Held That The Design And Cost Analysis Does Not Disclose Any Inventive Ideas Claimed In The '985 Patent.

Mr. Wilkins's and Mitsubishi's arguments based on the Design and Cost Analysis rest on the premise that it was "the *first* documented conception of a GE system to achieve LVRT." (Wilkins Br. 21; Mitsubishi Br. 8.) But that flawed argument should be rejected for several reasons.

First, before the district court, Mr. Wilkins and Mitsubishi argued that the October 2002 Design and Cost Analysis merely *corroborated* Mr. Wilkins's earlier supposed conception at Lake Benton. But both have now abandoned that theory of inventorship. As such, their new argument on appeal—that the Design and Cost Analysis demonstrates *on its own* that Mr. Wilkins conceived of and contributed to the '985 patent (Wilkins Br. 38-48; Mitsubishi Br. 28-44)—is waived. *See 3M*

Co., 673 F.3d at 1377-78 (“[I]t is improper for [an appellate court] to determine factual issues in the first instance on appeal.”); *Padgett v. Wright*, 587 F.3d 983, 985 n.2 (9th Cir. 2009) (per curiam).

Second, Mr. Wilkins and Mitsubishi attribute the *entire* Design and Cost Analysis to Mr. Wilkins. But the record confirms that, in the document, Mr. Wilkins (as instructed by his supervisor) collected ideas from many different GE employees. (A2365-66.) In fact, Dr. Harley admitted on cross-examination that the *only* concept in the document attributable to Mr. Wilkins was the use of a UPS. (A9175[113:5-19].)

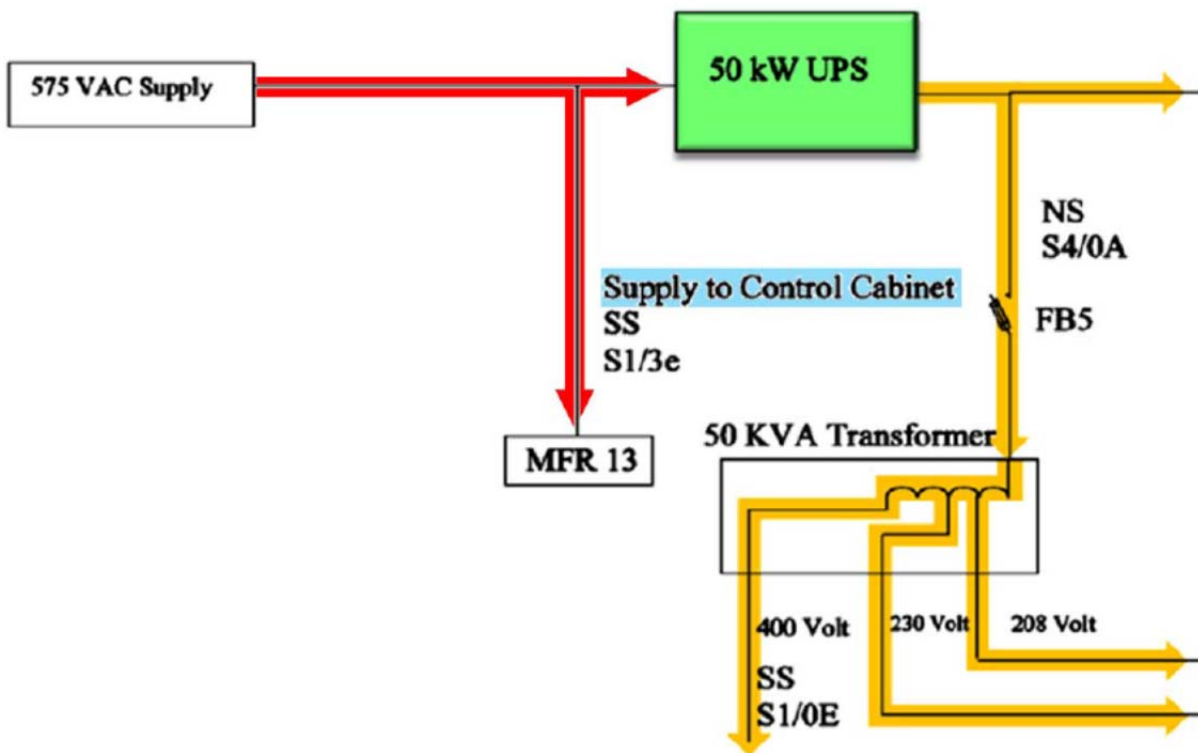
As Mr. Wilkins conceded, the idea to use a UPS to perform low voltage ride through was not novel in 2002. (A591-92[367:23-369:1].)¹³ Thus, if all Mr. Wilkins allegedly contributed to the ’985 patent was the basic idea to use a UPS (of any size), as Mr. Wilkins and Mitsubishi now claim, Mr. Wilkins would have contributed nothing beyond what was already known in the art. That is insufficient to make him a co-inventor. *Fina Oil & Chem. Co. v. Ewen*, 123 F.3d 1466, 1473

¹³ Mr. Wilkins and Mitsubishi incorrectly claim that GE attempted to distinguish the 50-kilowatt UPS in the Design and Cost Analysis from the ’985 patent based on the size and location of the UPS. (*E.g.*, Wilkins Br. 8.) GE merely referred to the size of the UPS to distinguish it from the other types of UPS-based systems in discussion (*e.g.*, the German solution), and merely referred to the location of the UPS (relative to the controller cabinet) in connection with the components that it could not power. GE did not try to read size or location requirements for the UPS into the claims.

(Fed. Cir. 1997) (“[A] person will not be a co-inventor if he or she does no more than explain to the real inventors concepts that are well known and the current state of the art.”).

Mr. Wilkins and Mitsubishi cannot overcome that problem simply because GE added a UPS limitation to claim 15 during prosecution. (Wilkins Br. 8, 65-66; Mitsubishi Br. 16.) As Mitsubishi concedes (Br. 36 n.2), it was the ***combination*** of the UPS to power the crowbar circuit during a low voltage event that made claim 15 allowable—not the UPS in isolation—and Mr. Wilkins admits that he made no contribution to the crowbar circuit. (A10[¶53]; A570[280:5-12]; A571[286:7-20]; A596-97[387:17-389:13].) Moreover, dependent claim 17 already contained the UPS limitation added to claim 15 (A3782-83; A3789-90), and even Mr. Meyer’s email—on which Mr. Wilkins and Mitsubishi rely so heavily—did not identify Mr. Wilkins as an inventor of claim 17 (A2787).

Third, on its face, the Design and Cost Analysis ***does not even show*** the key feature that Mr. Wilkins now claims to have invented—i.e., a UPS powering the wind turbine’s three controllers. Instead, the UPS (shown in green) sits on a different branch than from the “Supply to the Control Cabinet” (shown in blue) where the turbine controller and converter controller are located:



(A2320 (colors added).)

This means, as Dr. Harley admitted, that during a low voltage event, the UPS was incapable of powering the turbine and converter controllers—which would have been powered by the generator and grid. (A683[732:12-20]; A2320; *supra* pp. 21-23.)¹⁴ Moreover, Mr. Wilkins admitted that the Design and Cost Analysis does not show the UPS powering the turbine’s blade pitch controller.

¹⁴ Mr. Wilkins argues that the UPS provides power to the control cabinet through the connection to the right of the label “Supply to Control Cabinet.” (Wilkins Br. 18.) But the label for every other connection in the circuit diagram is to the left of the line, including the connection that Mr. Wilkins argues provides power to the control cabinet (already labeled “NS S4/0A”) (A2320.) A person of ordinary skill would interpret the circuit diagram as showing that the control cabinet is not connected to receive power from the UPS. (A684[734:1-9]; A813[1244:2-1245:8].)

(A598-99[395:7-396:6].) Therefore, this undisputed evidence confirms that the district court did not commit clear error in concluding that the Design and Cost Analysis did not disclose any inventive idea claimed in the '985 patent.

Mr. Wilkins and Mitsubishi cannot avoid that result by claiming that the *only* time Mr. Wilkins reduced his supposedly inventive idea to writing in the Design and Cost Analysis, he made a critical mistake depicting the same UPS component that he now claims was the core aspect of his inventive contribution (because, according to Mr. Wilkins, he “was drawing [it] so fast”). (A599[397:4-10].) It was not clear error for the district court to discount that remarkable claim, especially in view of Mr. Wilkins’s established lack of credibility and the mountains of other conflicting evidence.

Nor was it clear error for the district court to reject Mr. Wilkins’s attempted reliance on a November 2002 document that depicted the 50-kilowatt UPS in a different location. (Wilkins Br. 19.) Beyond Mr. Wilkins’s own testimony, there is no record evidence as to who prepared that document (which lists the initials “OS” in the “designed” box), or whether Mr. Wilkins had any involvement in the changed design reflected in the document (versus one of the dozens of employees who received the October presentation and diagram). Therefore, to the extent the November 2002 diagram contains any new ideas, Mr. Wilkins failed to establish

by clear and convincing proof that they were his ideas, or that the ideas in the document contributed in any way to the claims of the '985 patent.

Fourth, the evidence also does not support Mr. Wilkins's apparent attempt to argue on appeal (Br. 45) that the crowbar circuit identified in the Design and Cost Analysis is the same crowbar circuit that the '985 patent requires. The type of crowbar described in the '985 patent is a "reversible" circuit that operates "in response to a control signal from the converter controller" (i.e., one that can be selectively activated and deactivated as needed). (A138[5:4-9]; A139[8:1-3].) The Design and Cost Analysis does not disclose that type of crowbar (A2317), and in any event, Mr. Wilkins admitted that the use of a crowbar circuit was not his idea (*supra* p. 55).

Fifth, on appeal, Mitsubishi raises a new (and therefore waived) argument premised on the idea that the response of the blade pitch system in claim 1 could only be accomplished with the 50-kilowatt UPS proposed by Mr. Wilkins. (Mitsubishi Br. 10, 28, 30-31.) But nothing in claim 1 requires a 50-kilowatt UPS. As Mr. Hoffmann explained, using a large UPS in the way suggested by Mr. Wilkins, would mean that the wind turbine would operate as usual, blind to a low voltage event. (A782-83[1121:6-1123:24, 1124:18-1125:13]; A787[1141:23-1143:4]; A2321.) Thus, there would be no risk of an over-speed condition, and no need to transition to a different mode of operation that results in varying the pitch

of the blades, as claim 1 requires. (*Id.*) Thus, the claimed invention is a fundamentally different from, and does not require, Mr. Wilkins's proposed 50-kilowatt solution.

Sixth, the Design and Cost Analysis also does not provide clear and convincing evidence of conception because it does not disclose a complete or operative invention. The trial record shows that, even several months after Mr. Wilkins quit, "many of the details" of his 50-kilowatt UPS proposal were still "not completely defined," "not reduced to practice," and "not proven to work." (A749[989:11-990:16]; A2108.) Mr. Wilkins admitted that he is not aware of anyone in the world who has implemented that unfinished idea, even today. (A602[411:5-15].) Such an incomplete solution cannot demonstrate conception of the claimed invention. *See Ethicon*, 135 F.3d at 1460.

Seventh, Mr. Wilkins and Mitsubishi argue that the district court committed legal error by failing to compare the Design and Cost Document to the claims of the '985 patent. But in its decision, the district court expressly stated that it had: (i) considered *all* documentary evidence (including the Design and Cost Analysis, which it discussed at length) (A9-10[¶¶47-53]); (ii) compared that evidence to the claims of the '985 patent; and (iii) concluded based on that analysis that Mr. Wilkins had not contributed anything to those claims: "Simply put, there are no

reliable documents that verify what, if anything, Mr. Wilkins contributed to *any of the claims* of the '985 patent.” (A18 (emphasis added).)

Finally, Mr. Wilkins argues (Br. 40-42) that the district court erred by comparing his alleged contribution to the particular embodiment that the German team developed. But this Court has approved considering the path that the named inventors took to arrive at the claimed invention to assess whether a putative inventor made any inventive contribution to their discovery. *See, e.g., Hess*, 106 F.3d at 980-81 (finding district court “justifiably concluded” that putative inventor did not make any inventive contribution by reviewing steps named inventors took in reaching their discovery). Given the significant differences between the 50-kilowatt turbine-isolating UPS solution that Mr. Wilkins proposed and the controller-based solution that the German team discovered, the district court correctly concluded that Mr. Wilkins made no inventive contribution to the German team’s work.

2. The District Court Correctly Concluded That Mr. Wilkins Did Not Contribute To The Claimed Invention Of The '985 Patent.

Even if Mr. Wilkins could establish that he conceived of an inventive idea claimed in the '985 patent, that would be insufficient to make him a co-inventor absent additional proof that he also made a significant contribution to the named inventors’ conception. *Nartron Corp. v. Schukra U.S.A. Inc.*, 558 F.3d 1352,

1356-57 (Fed. Cir. 2009) (“[A co-inventor] must contribute in some significant manner to the conception or reduction to practice of the invention [and] make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention.”). Here, the evidence that Mr. Wilkins cites is devoid of any such proof.

First, Mr. Wilkins relies on email exchanges that he had with some of the named inventors beginning in the spring of 2002. (Br. 13.) But as the district court correctly found, and as Mitsubishi admits, those emails merely reflect generic discussions between Mr. Wilkins and two named inventors about general turbine components and operation—with “**no** specific mention in any of the emails of a UPS coupled to a converter for the purpose of LVRT,” let alone that Mr. Wilkins provided that idea to the German inventors. (A8[¶37]; Mitsubishi Br. 40 (“[N]ot one of those communications mentions a UPS.”).) That lack of disclosure is fatal. *See Symantec*, 522 F.3d at 1296 (holding evidence of discussions between named inventor and putative co-inventor concerning subject matter of claimed invention was insufficient to establish co-inventorship); *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363-64 (Fed. Cir. 2004) (same); *Hess*, 106 F.3d at 980-81 (same).

The emails themselves also refute Mr. Wilkins’s attempt to cast himself as an invaluable resource on low voltage ride through that the named inventors relied upon extensively and “peppered” with questions. (Br. 13.) For example, in his

July 2002 email, Mr. Luetze expressly declined to allow Mr. Wilkins to participate at that point, preferring instead “to start a discussion” with him during his planned visit to Germany. (A4014.) Mr. Luetze also made clear that any subsequent discussions with Mr. Wilkins would not change “the general concept of the design” that his German team had already developed. (*Id.*)

The same emails further show that, by July 2002, the German team had already prepared a “very detailed spec” for achieving low voltage ride through, and that “[d]raft specifications and concept documents” for their solution were available for download through an internal GE website. (A4014.) Mr. Luetze also described a planned presentation to outline his team’s strategy for using controllers and an “active crowbar assembly” (i.e., one powered by a UPS during a low voltage event) to meet the E.On standard. (*Id.*) The district court correctly relied on these disclosures in finding that the German team had already made significant progress well before the October 2002 Design and Cost Analysis that Mr. Wilkins and Mitsubishi now tout as the supposed first conception of the claimed invention. (A10[¶54].)

Second, Mr. Wilkins suggests that he exchanged inventive ideas with the named German inventors during a trip to Germany in August 2002. But as Mr. Wilkins admits, “no documents record the substance of those meetings.” (Br. 15.) Nor can Mr. Wilkins account for that lack of corroborating proof based on his own

testimony (which he now disclaims), or on Mr. Luetze's testimony (which just states that he and Mr. Wilkins generally discussed the use of a UPS during the visit). As noted above, the use of a UPS in low voltage ride through was already well known by that time—or, as Mr. Luetze put it, a “very obvious requirement.” (A614[459:5-8].)

Further, as also detailed above, Mr. Luetze could not identify any specific contribution that Mr. Wilkins made during the August 2002 meeting (or otherwise) to the claimed invention of the '985 patent—which involves the specific use of a UPS to power specific controllers during a low voltage event for a specific purpose.¹⁵ (A613[453:21-454:3]; A615[462:16-24].) Again, this lack of proof is fatal to Mr. Wilkins's claim that he contributed the inventive aspects described in Mr. Luetze's November 2002 email. (Br. 48.) He simply has no credible proof for that assertion, and certainly no clear and convincing proof.

Third, Mr. Wilkins appears to suggest that his October 2002 Design and Cost Analysis contributed to the low voltage ride through solution reflected in Mr.

¹⁵ Contrary to Mr. Wilkins's argument (Br. 29), Mr. Luetze's testimony that he did not “understand that [Mr. Wilkins's] name is not on the list here” (A615[462:9-15]) does not demonstrate any contribution from Mr. Wilkins either. It is not even clear that Mr. Luetze—who is not a native English speaker—was even referring to the “list” of inventors for the '985 patent. The question as initially posed to Mr. Luetze referenced an exhibit with an email distribution list (A3980) that did not include Mr. Wilkins as a recipient. (A613-15[453:21-454:3, 459:5-8, 461:6-462:8, 462:16-24].)

Luetze's November 2002 email. (Br. 21-23.) As detailed above, however, the record confirms that the German inventors had already reached their controller-based solution months earlier. Moreover, the record is devoid of proof that Mr. Luetze or any other named inventor relied on anything discussed in the Design and Cost Analysis as part of their conception.

Finally, Mr. Wilkins (Br. 24-26) and Mitsubishi (Br. 25) point to the December 16 invention disclosure that Dr. Fogarty prepared (listing Mr. Wilkins as a co-inventor) as evidence of Mr. Wilkins's supposed contribution to the '985 patent. But even Mitsubishi admits that Dr. Fogarty "only became involved...after Wilkins's departure and therefore did not know what contributions Wilkins had made." (Mitsubishi Br. 14.) Mitsubishi can hardly claim that Mr. Wilkins was a co-inventor simply because Dr. Fogarty listed Mr. Wilkins on an invention disclosure two weeks after Mr. Wilkins left GE—without any firsthand knowledge of what Mr. Wilkins did. Mitsubishi's argument also conflicts with the district court's well-supported finding that Mr. Wilkins's name appeared on that document solely because of a "hurried job"—and nothing more. (A12[¶75].)

Therefore, because Mr. Wilkins and Mitsubishi failed to prove by clear and convincing evidence that Mr. Wilkins contributed anything inventive to the named inventors of the '985 patent, their inventorship claim fails as a matter of law—as the district court correctly found.

CONCLUSION

The district court's judgment that Mr. Wilkins is not a co-inventor of the '985 patent should be affirmed.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I filed the foregoing Brief for General Electric Company and GE Wind Energy, LLC with the Clerk of the United States Court of Appeals for the Federal Circuit via the CM/ECF system this 26th day of July, 2013, and served a copy on counsel of record by the CM/ECF system and by electronic mail to the parties on the service list below.

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rules of Appellate Procedure 32(a)(7)(C), the undersigned hereby certifies that this brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B)(i).

1. Exclusive of the exempted portions of the brief, as provided in Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b), the brief contains 13,825 words.

2. The brief has been prepared in proportionally spaced typeface using Microsoft Word 2010 in 14 point Times New Roman font. As permitted by Federal Rule of Appellate Procedure 32(a)(7)(C), the undersigned has relied upon the word count feature of this word processing system in preparing this certificate.

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